

Erratum: Experimental Vibrational Zero-Point Energies: Diatomic Molecules [J. Phys. Chem. Ref. Data 36, 389-397 (2007)]

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Key words: molecular energetics; uncertainty; vibrational spectroscopy; viscosity; zero-point energy.

There is a typographical error in a state designation for Cl_2^+ on page 390 in the last sentence of Sec. 3. This sentence should read: "For Cl_2^+ , only separate constants for $^2\Pi_{3/2g}$ and $^2\Pi_{1/2g}$ were reported.⁷"

There is a transcription error for the harmonic frequency (ω_e) of SiF in Table on page 392. The correct entry for SiF in this table should be:

| Molecule | ω_e | $\omega_e x_e$ | $\omega_e y_e$ | B_e | α_e | Reference |
|----------|---------------|----------------|----------------|----------------|----------------|-----------|
| SiF | 857.32507(22) | 4.83419(9) | 0.019807(16) | 0.58125735(21) | 0.00503859(39) | 84 |

The transcription error for the harmonic frequency (ω_e) of SiF resulted in an error in the calculated zero point energy (ZPE) for SiF in Table 5 on page 395. The correct entry for SiF in this table should be:

| Molecule | State designation | ZPE | u_{stat} | u_{trunc} |
|-------------------------------|-------------------|-------------|-------------------|--------------------|
| $^{28}\text{Si}^{19}\text{F}$ | $^2\Pi$ | 427.6724(2) | 0.00019 | 0.000021 |

I thank Dr. Russell D. Johnson III for pointing out these errors.